The aim of this study was to assess various cognitive abilities such as attention, IQ, reasoning, and memory related to academic achievement in 8- and 9-year-old preterm children. A total of 141 children were assessed. The preterm group (= 37 weeks) comprised 63 children and was compared to 78 fullterm children. Attention was evaluated using the d2 Selective Attention test, and the IQ by the L-M form of the Stanford-Binet Intelligence Scale, establishing a profile of abilities: perception, memory, comprehension, reasoning, and verbal fluency. Significant differences in IQ were found between the preterm and full-term children. Of the cognitive abilities assessed, the only significant differences were found in verbal fluency, with preterm boys showing lower verbal fluency scores than full-term children. In conclusion, all preterm groups have attention ability similar to that of full-term children. However, preterm children obtain lower scores in intelligence measures. In addition, preterm boys have verbal fluency difficulties. Taking into account the increase in preterm births, suitable intervention programs must be planned to attend the difficulties found.